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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,387	10/11/2002	A. John Speranza	PES-D-02030	2780

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EXAMINER	
KALAFUT, STEPHEN J	

ART UNIT	PAPER NUMBER
1745	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/065,387	SPERANZA ET AL.	
	Examiner	Art Unit	
	Stephen J. Kalafut	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *(3 dates)*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claims 10-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 is confusing because it recites "selected characteristics" for the primary power source, and than "said selected characteristics" for the secondary source, implying that these are the same. However, if the two sources are different types, such as a power grid (AC) and a fuel cell (DC), how they can exhibit the same characteristics is not understood.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-7 and 9 are rejected under 35 U.S.C. 102(b) or (a) as being anticipated by Yamaguchi *et al.* (JP 2001-266,923), cited by applicants.

Yamaguchi *et al.* disclose a power supply system including a primary source (wind turbine 8 or solar battery 9), a secondary power source (fuel cell 2), and a bridging power source (electrolysis cell 3) all connected in parallel via a cable (20) which would form a bus. The system also includes a controller (22) and a converter (12) which would convert the output of the fuel cell to be compatible with the power delivered by the cable bus. Regarding claims 5-7,

while they recite certain characteristics for the capacitor, they still encompass the bridging power source being either the battery or the electrolysis cell, and thus are still anticipated. Regarding the subsections of §102, if the present claims are entitled only to the filing date of provisional application Serial No. 60/410,412, subsection (b) would apply. If they are entitled to the filing date of Serial No. 60/328,996, subsection (a) would apply.

Claims 1, 2, 5-7 and 9 are rejected under 35 U.S.C. 102(a) as being anticipated by Takeuchi (JP 2002-75,366), cited by applicants.

Takeuchi discloses a power supply system including a primary power source (1), a secondary power source (fuel cell 6), a battery (9) and an electrolysis cell (4), all electrically connected together, and thus forming a bus. A converter (3) allows power to move from the primary source to the electrolysis cell. Regarding claims 5-7, while they recite certain characteristics for the capacitor, they still encompass the bridging power source being either the battery or the electrolysis cell, and thus are still anticipated. This rejection may be overcome by a showing that the present claims are entitled to the filing date of provisional application Serial No. 60/328,996.

Claims 1, 3-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hibbs *et al.* (US 5,810,284), cited by applicants.

Hibbs *et al.* disclose a power system for an airplane, comprising a primary power source (solar arrays 113), a secondary power source, which is a regenerative fuel cell (104), which in turn includes fuel cell and electrolyzer units (figure 14). These are all electrically connected to a

power bus (151) and controlled by a master controller (269) and power conditioning equipment (figure 11), which would be a type of converter. Regarding claims 5-7, while they recite certain characteristics for the capacitor, they still encompass the bridging power source being either the battery or the electrolysis cell, and thus are still anticipated.

Claims 1, 3, 5-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Oki *et al.* (EP 755,088), cited by applicants.

Oki *et al.* disclose a power supply system including a primary power source (3), a secondary power source (fuel cell 11) and an electrolysis cell (9), all connected electrically to a distribution line (14), which would thus form a bus. A regenerative controller (12) is electrically disposed between the distribution line and the fuel cell, which would be able to activate the fuel cell and electrolysis cell when needed. Regarding claims 5-7, while they recite certain characteristics for the capacitor, they still encompass the bridging power source being either the battery or the electrolysis cell, and thus are still anticipated.

Claims 1, 2, 5-7 and 9 are rejected under 35 U.S.C. 102(b) or (a) as being anticipated by Routtenberg (WO 01/28017), cited by applicants.

Routtenberg discloses a power supply for an electric motor comprising a primary source (power grid 606), a secondary source (fuel cell 620) and an electrolysis cell (634), all connected electrically, thus forming a bus. The system also includes a controller (computer 624) and a converter (618) located between the primary source and both the fuel cell and electrolysis cell, the controller activating these components as needed. Regarding claims 5-7, while they recite

certain characteristics for the capacitor, they still encompass the bridging power source being either the battery or the electrolysis cell, and thus are still anticipated. Regarding the subsections of §102, if the present claims are entitled only to the filing date of provisional application Serial No. 60/410,412, subsection (b) would apply. If they are entitled to the filing date of Serial No. 60/328,996, subsection (a) would apply.

Claims 1, 2 and 8 are rejected under 35 U.S.C. 102(b) or both (a) and (e) as being anticipated by Jungreis (US 6,184,593), cited by applicants.

Jungreis discloses a power supply system including a primary power source (10), a battery or capacitor (16' for either) which would correspond to the present "bridging power source", as well as a fuel cell (column 3, lines 62-65), which would correspond to the present "secondary power source", all connected to a power bus (12-1). The DC sources would all be connected to the bus via a converter (22). Regarding the subsections of §102, if the present claims are entitled only to the filing date of provisional application Serial No. 60/410,412, subsection (b) would apply. If they are entitled to the filing date of Serial No. 60/328,996, subsections (a) and (e) would apply.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Schell (US 6,593,671).

Schell discloses a power supply device including a primary power source (generator 4), a fuel cell (1) and a battery (3), all connected in parallel, and thus forming a bus.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jungreis (US 6,184,593), *supra*.

These claims differ from Jungreis by reciting characteristics of the capacitor used as a backup power supply. Since the ordinary electrical engineer would desire a capacitor to be electrically compatible with the other components of the power system, determining optimal characteristics for this capacitor would be within the skill of such an engineer. For this reason, these claims would be obvious over Jungreis.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-24 of copending Application No. 10/065,386. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of Serial No. 10/065,386 would be fully encompassed by the present claims, since those claims recite "primary", "bridging" and "secondary" power sources, and a controller which activates or deactivates the secondary and bridging sources upon certain characteristics being achieved. Both the present claims and those of the other application also recite the same general details, such as the types of operational parameters (unfueled, inoperable, status, diagnostics, etc.) and the use of computer code to run the operation of the power supply system.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Computer-generated translations of Takeuchi and Yamaguchi *et al.* are enclosed.

The disclosure is objected to because of the following informalities: Drawing numerals 36, 60, 216 and 236 are not found in the specification. In section 0035, line 10, the word "buss" appears to be misspelled. Appropriate correction is required.

Claims 1-20 are objected to because of the following informalities: A space is needed between the period after each number and the first word of each claim. Appropriate correction is required.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 571-272-1286. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sjk

STEPHEN KALAFUT
PRIMARY EXAMINER
GROUP 1700